

# bitscan

## Hyderabad Campus



Acting Vice-Chancellor, Prof VS Rao receiving the award from Smt Smriti Irani, Hon'ble Union Minister for HRD

**BITS Pilani Ranked 9<sup>th</sup> Top University by  
National Institutional Ranking Framework (NIRF)**

## Eminence Graces the Campus



*Prof BVR Chowdari*



*Dr Bhaskar Rao, CEO - KIMS*



*Prof Jeremy C Simpson*



*Prof RN Biswas*



*Shri Gururaj Deshpande*



*Shri Hansraj Gangaram Ahir  
Hon'ble Minister for Fertilisers*



*Shri Grandhi Mallikarjuna Rao, GMR*



*Shri Lagadapati Raja Gopal*



*Shri Prasad Devineni  
Film Producer*



*Shri Sudhakar Komakula  
Film Actor*



## New Director Takesover

On 16 July 2016, Prof G Sundar was appointed as Director, Hyderabad Campus. This appointment is in addition to his current role as Director, off-campus Programmes & Industry Engagement. Prof G Sundar succeeded Prof VS Rao as Director of Hyderabad Campus.

Prof Sundar has been with BITS Pilani for close to three decades, and has served with distinction in a number of roles. He obtained his Master's degree in Chemistry from IIT Kanpur, and his PhD (Chemistry) from Cornell University before joining BITS Pilani in 1987.

Prof Sundar has held various positions at BITS over the years, all of which he has served with distinction, and left a mark. He has been Group Leader; Dean, Student Welfare Division; Chief Warden; Dean, Practice School;

Deputy Director, Off-campus Programmes; and Director Off-campus Programmes and Industry Engagement. His academic interests are in Thermodynamics, Statistical Mechanics, Quantum Chemistry, and Chemical Instrumentation, and he is well respected as a teacher by students and faculty colleagues. His tenure as Chief Warden and Dean Student welfare has given him a deep understanding of student motivations and aspirations. In 2013 he led a programme to improve and transform the Work Integrated Learning Programme, and the programme is being implemented with excellence.

Prof Sundar's deep understanding of belief in rigorous academic processes, and the importance and benefits of industry engagement and research, will surely hold him in excellent stead in this new, additional assignment.



## Farewell to Prof VS Rao

A special function was organized on Saturday, 16 July 2016 to bid farewell to Prof VS Rao. He was associated with BITS Pilani for over four decades in various capacities such as Dean Practice School, Deputy Director off-Campus programmes, Director, BITS Pilani, Hyderabad campus and Acting Vice Chancellor, BITS Pilani University. He was the Founder Director for BITS Pilani, Hyderabad campus and established the campus which has now blossomed into one of the finest aesthetically pleasing university campuses in India. Prof Rao had demonstrated strong industry linkages by virtue of developing extensive work-integrated programs for the University. While candidly talking about his experience, Prof VS Rao said 'While moving out, I feel contented with a sense of accomplishments, and energized to take up more responsibility of building a Futuristic University. Lessons I have learned during the last 44 years of life at BITS Pilani, I feel, will be of immense help in my new assignment. I can never forget what Hyderabad and you – my friends & well-wishers - have given me in achieving whatever I am now.'

Prof VS Rao will always be fondly remembered as a true BITSian and for what he has done for education, for BITS Pilani and especially, for everyone who has been a part of BITS Pilani, Hyderabad Campus. BITS Pilani, Hyderabad Campus family wishes him great success in all his future endeavors.





## Bhoomi Pooja for Phase II of the Campus

On Saturday, 20 February 2016, Mr K Taraka Rama Rao, Hon'ble Minister for Panchayat Raj, Municipal Administration, Urban Development & IT, Telangana State, participated in the Bhoomi Pooja ceremony as the Chief Guest in the presence of the Acting Vice Chancellor, Prof VS Rao. The Hon'ble Minister unveiled the foundation-stone for the second phase construction, besides flagging off a ride-for-environment, a bicycle tour, organized jointly by the Hyderabad Bicycle Club and BITS Piani, Hyderabad Campus.

BITS Pilani, Hyderabad campus completed its first phase of construction activities in 2014 with 1.8 million sq ft of built-up area of the campus sprawling in 200 acres.

The Institute has embarked upon a major expansion plan with an outlay of Rs 374 crore, in order to increase the student strength to 5300 by 2020-21. The additional intake of students will start from academic year 2017 and the increase is mainly in PG and Ph.D.

This second phase construction will include hostel buildings, faculty and staff housing, academic building and other amenities like open-air theatre, sports facilities, swimming pool etc. The renowned architects Hafeez Contractor (AHC) have provided drawings for the expansion plans.

The project is expected to be completed by December, 2018 and the institute will start admitting the increased number of students from 2017 onwards.



## 10<sup>th</sup> Foundation day Celebrations and Abhinandan Samaroh for BITSians in Civil Services

On Thursday, 28 April 2016, the 10<sup>th</sup> Foundation day was celebrated. As part of the celebration 'Abhinandan Samaroh' for BITSians in Civil Services was held. This was a first-of-its-kind group wherein BITS Pilani connected with BITS alumni in Civil Services, and arranged a felicitation which should go a long way in sensitizing the students to opt for Civil Services. 80 BITSians in Civil Services were invited of which 18 were able to attend the function. They were felicitated by Prof VS Rao, Acting Vice Chancellor for their academic achievement and contribution to the Society. Dr BVR Mohan Reddy, Founder and Executive Chairman, Cyient and Chairman, Board of Governors, IIT-Hyderabad was the chief guest.

On this occasion Prof Rajendra Srivastava, Dean ISB; Mr K Padmanabhaiah, Former Union Home Secretary, Prof HP Tiwari, Former Professor of Chemistry of Pilani Campus, Mr Chandramouli, first Civil Servant from BITS, Pilani and Mr Srinu Raju, Chairman Peepul advisors, were the guests-of-honour.

On this occasion the 'Profile book of BITSians in Civil Services 2016' and the 'Photo Book of Hyderabad Campus' were released.





## Mission Kakatiya: Signing of MoU between Government of Telangana and BITS-Pilani, Hyderabad Campus

A Memorandum of Understanding was signed between The Government of Telangana State (GoTS) and BITS-Pilani, Hyderabad Campus on 4 February 2016. The GoTS has taken up several irrigation projects consisting of different types of works such as major lift irrigation schemes, canals and tunnels, construction of reservoirs, cross masonry and cross drainage works and efficient water distribution systems. The GoTS wants to get the technical support from BITS-Pilani, Hyderabad Campus to ensure proper planning, design and implementation of these projects. This will also provide opportunity to the faculty and students to get a first hand experience in implementation of the irrigation projects.

As a part of the MoU, the Civil Engineering Department, BITS-Pilani, Hyderabad Campus is taking up consultancy projects from 2 different divisions of the Irrigation Department, GoTS for technically supporting the Engineers and the department. The soil testing is being carried out on the soils obtained from different site locations and the engineering properties of the soils are reported. The two major projects taken up are (i) Palamuru Rangareddy Lift Irrigation Scheme (PRLIS) and (2) Dindi Lift Irrigation Scheme (DLIS). Till date, approximately 300 disturbed and 50 undisturbed soil samples are tested and reported to the client by the Department of Civil Engineering. The

consultancy fees obtained from the projects, till date, is approximately rupees 40 lakhs.

In Mission Kakatiya, millions of tonnes of sand are required as a filter material for construction of earthen dams. The engineers are looking for technical support from BITS-Pilani, Hyderabad Campus for finding an alternative material as filter. Tests were carried out on the manufactured sand supplied by the irrigation department and the reports were submitted on the feasibility of manufactured sand as a filter material.

The faculty involved in Mission Kakatiya are:

- Prof Jagadeesh Anmala (Former Head, Department of Civil Engineering)
- Prof Sridhar Raju (Head, Department of Civil Engineering)
- Prof Vinayaka Ram (Consultancy-in-charge, Department of Civil Engineering)
- Dr Anasua Guha Ray (Consultancy Convener, Geotechnical Testing, Department of Civil Engineering)
- Dr Mohan SC (Faculty Department of Civil Engineering)
- Dr Arkamitrakar (Faculty Department of Civil Engineering)

The faculty members are also involved in the meetings and discussions arranged by the Chief Engineer, Projects at their office in Hyderabad.



## Matribhasha Diwas Celebrations @ BITS, Hyderabad Campus

BITS Pilani, Hyderabad Campus celebrated *Matribhasha Diwas* (Mother language Day) on 3 March 2016. Regional associations like Brundaavanam Telugu Samiti, Gitanjali Bengali Association, Maharashtra Mandal, Baithak, Sangam, Gujarati Association and Utkal Samaj – each comprising students from a particular linguistic community, reflected on the glory of their respective languages and cultures. They presented posters and made PPT presentations detailing the origin, evolution and the current state of the language, eminent personalities from different fields who contributed to the growth of the language, famous texts, places of linguistic significance etc.

Prof VS Rao, the acting Vice-Chancellor of the Institution and the Director of the Campus, inaugurated the proceedings by lighting a lamp. The posters and presentations were assessed by a group of faculty members from the Campus. While Brundaavanam, the Telugu students' club, was awarded the first prize for its beautiful and sensible display, Baithak and Sangam, the two clubs representing Punjabi-Urdu-Hindi and Hindi student population respectively, won the second and the third prize. The celebration was a true representation of the linguistic and cultural diversity of India.





## Academic Confluence of Ideas, Intellect and Information

### International Symposium on Wind Engineering & Wind Energy, 28 January, 2016

The International symposium brought together experts in both the fields and provides a platform for exchange of ideas, and bring out novel solutions and thoughts towards reducing the impact of wind on structures at the same time harnessing it for energy needs. This symposium had the following keynote speakers: (1) Prof Yukio Tamura (Tokyo Polytechnic University, Japan, Former President, IAWQ) (2) Prof Shuyang Cao (Professor, Tongji University, Shanghai, China, Secretary General, IAWQ) (3) Prof Prem Krishna (Chairman Research Council, CSIR-CBRI Former Professor and Head of Civil Engineering Department, IIT Roorkee) (4) Dr Gomathinayagam, Director General (DG), National Institute of Wind Energy (NIWE), Formerly C-WET (5) Prof KK Sasi, (Project Director, Ahalia Alternate Energy Pvt Ltd, Palakkad PG Program Co-Chair, Amrita School of Engineering, Coimbatore Professor – Electrical & Electronics Engineering, Amrita Vishwa Vidyapeetham University Coimbatore, India)

### One-Day Workshop on Materials Characterization using Electron Backscatter Diffraction Technique, 14 March, 2016



Electron Back-Scatter Diffraction (EBSD) using a Scanning Electron Microscope (SEM) is effectively used texture determination. Using this technique individual grain orientation can be determined by evaluating Kikuchi patterns. EBSD has become highly automated and provides quantitative crystallographic analysis at a resolution as small as a few tens of nanometers. The purpose of the workshop is to illuminate the basics of crystallography and crystal texture, the EBSD system, effects of measurement and processing parameters on EBSD mapping results as well as to give handy tips for sample preparation.

### 2<sup>nd</sup> National Conference on Design and Manufacturing Technologies for Product Life Cycle, 19-20 March, 2016

The DPLC-2016 conference is on the emerging philosophy of incorporating the constraints of various other stages in the product life cycle at design stage itself. What was a discrete and completely disconnected scenario of product life cycle with inherent inefficiency has now completely metamorphosed into an integrated set of activities. Developments in many technical areas of design and manufacturing have been responsible for successful integration. These state-of-the-art technologies in both systems and technological frameworks form the topics of this conference. The DPLC-2016 is the 2<sup>nd</sup> conference in the series organized by the Department of Mechanical Engineering, BITS Pilani. The first conference, DPLC-2006, was organized at BITS Pilani, Pilani campus, Vidya Vihar, Pilani, Rajasthan in Feb 2006, to which there was enormous response. In this second version, DPLC-2016, we have included in the scope the innovative manufacturing technologies that can influence the decision making in design stage and efficiency of the downstream stages of the product life cycle.

### Recent Advances in Manufacturing and Robotics (RAMR), 22-23 April, 2016

Department of mechanical engineering organized a conference on 'Recent Advances in Manufacturing and Robotics – RAMR2016' during 22-23 April, 2016. The conference aimed to describe the latest regional and global research results and forefront developments in robotics and advanced manufacturing field. This conference served as a premier forum for academic exchange between leading experts, scholars and researchers in the domain of interest. The response for the conference was good and participants from different parts of the country have shared their research work during different sessions of the conference.



Dr C Sharada Prabhakar from Advanced Systems Laboratory, Hyderabad has inaugurated the conference

and she delivered an inaugural speech on 'Characterization and processing of Advanced Materials used for Defense Applications'. There were two keynote speeches by Prof Kurienlssac, IIST, Thiruvananthapuram on 'Advances in robotics' and Prof Abhay Sharma, IIT, Hyderabad on 'Manufacturing Process Modeling and Optimization'. The organizing secretaries for the conference were Dr CP Kiran and Dr Amrita Priyadarshini.

### Three-Day Workshop on Computational Fluid Dynamics, 11-13 August, 2016

The main objective of this workshop is to create awareness among young researchers about the challenging and growing field CFD; to introduce CFD, fundamental principles and wide range of its industrial applications. The honorable speakers we have during the workshop: Prof Suman Chokarborty, IIT KGP, Prof S Vengadesan, IIT Madras; Prof Arnab Roy, IIT Kharagpur; Mr Balaji Parthasarathy, Head, India Engineering, GE Industrial, Dr Afroz Javed, DRDO, Mr Trilok, GE Industrial. About 42 participants representing various research organizations, academic institutions and Industries have attended this workshop.

### One-Day workshop on Hands on Microcontrollers, 5 November, 2016

In the present world of rapid technological changes, there is an urgent demand for the very best quality products and services. This scenario has broken the walls of engineering disciplines, and today's world is curiously looking for the innovative and creative products through the synergistic integration of various engineering disciplines. The workshop on 'Hands-on-Microcontroller' was an attempt towards interdisciplinary learning, organized by the department of Mechanical Engineering. The participants were mostly from BITS PILANI, Hyderabad Campus, students and faculty members from other institutes. The workshop was focused on the basics of Arduino Microcontroller that helped in understanding the control, programming issues and enabled the participants to explore further. The prime learning objectives included interfacing of various actuators and sensors, with timer and counter applications.



### Workshop Organised by Dept. of Economics and Finance

A workshop on 'Business Analytics' was organized by the Department of Economics and Finance on 12<sup>th</sup> November 2016. Prof Uday Bhate, managing partner and co-founder of a consultancy company nmore took sessions on various softwares used for business analytics.

- In 2016, CSIS Department has conducted training sessions for CSE faculty from MITS (Madanapalle Institute of Technology & Science), in two spells: (i) 26-27 February, 2016 and (ii) 26-27 August, 2016., as part of MoU between BITS Hyderabad Campus and MITS Madanapalle, AP.
- A one-day workshop on 'Big Data in Astronomy' was conducted on 2 October, 2016. Prof Ajit Kembhavi, former Director of Inter University Centre for Astronomy & Astrophysics (IUCAA) inaugurated the workshop and delivered the inaugural lecture. The workshop saw enthusiastic participation by more than 30 students of our campus.

- One day training on 'Electrical Safety and Arc Flash Hazards' to Shantha Biomechanics at Medchal was carried out by Dr Alivelu Manga Parimi on 9 August, 2016.

The workshop is given to 80 industrial staff in Electrical field in that particular industry. Through this workshop the staffs were made aware of the Electrical Hazards faced by them and understand the possible precautions there have to maintain accordingly to industrial standards and thus have an Electrically Safe Working Condition.

- Workshop on Structure Formation in Standard Cosmology in association with IUCAA – Pune.

The workshop was organized during 19-23 December, 2016. The goal of the workshop was to identify the candidates from various universities at the early stage of their research career and introduce them to the field of structure formation and the different ways in which one can contribute to the field i.e. theoretical modeling, data analysis or simulation. Prof B Mishra is the coordinator; Dr Rahul Nigam and Prof PK Sahoo are the co-conveners of the workshop.



- Advanced Level Training Programme in association with IIT Bombay under the auspices of National Programme on Differential Equations; Theory, Computation & Application.
- The training programme was organized during 25 May - 14 June, 2016. The objectives of the workshop were to



provide a sound mathematical foundation for research in applied mathematics especially in partial differential equations (PDE) and computational PDEs and to create a pool of trained manpower for academic jobs, research and development organizations and industry. Dr N Kishore Kumar and Dr N Anil are the local coordinators of the training programme.

- Winter Institute of Global Health (Jan 4th-12th, 2016): An annual meeting involving ~40 participants that get hands-on training on public health research involving experts from different institutions like PACE University, BITS-Hyderabad Campus and Apollo hospitals.



### International Visits by Faculty

- **Dr Arkamitra Kar** attended a workshop at West Virginia University, Morgan town, WV, USA in summer 2016. Application of stochastic modeling to structural engineering problems was the focus of the workshop and it has resulted in collaborative research with Prof Avinash Unnikrishnan from Portland State University.
- **Dr Arkamitra Kar** visited the Michael Baker International at Pittsburgh, USA for discussion on development of a web based application to predict the shrinkage strains of concrete, July 2016.
- **Prof N Rajesh** visited Japan Advanced Institute of Science and Technology, Japan during 14-19 May, 2016 to explore possible collaboration with BITS.
- **Prof Manab Chakravarty** visited International Conference on Stereochemistry-2016, Sao Paulo, Brazil.
- **Dr Subhas Ghosal** visited Chongqing, China from 4-6 June, 2016 for an invited lecture in the World Congress of Advanced Materials (WCAM 16).
- **Prof NL Bhanu Murthy** presented his research paper at the International conference ICISE, Los Angeles, USA, during 20-22 April, 2016.
- **Prof NL Bhanu Murthy** presented his research paper at the International conference SNPD 2016, Shanghai, China, during 30 May, 2016 and 1 June, 2016.
- **Prof Chittaranjan Hota** visited the Systems and Network security group at Vrije University, Amsterdam (NETHERLANDS) to pursue joint research and demonstration activities in the funded research project, in September, 2016 (One week).
- **Mrs K Prafulla** presented a paper at the 7<sup>th</sup> International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN), London, UK, during 19-22 September, 2016.
- **Dr Geethakumari** presented a paper at the 9th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2016), Shanghai, China, during 6-9 December, 2016.
- **Dr Swati Biswas** visited Belarus as part of the DST Indo-Belarus project titled 'Tumor Targeted Nanomedicines for photodynamic therapy'. Date: 11-16 September, 2016.
- **Dr B Harihara Venkatraman** of the Department of Physics presented a paper in the IEEE International Conference on the Application of Ferroelectric Materials held at Darmstadt, Germany from 21-25 August, 2016.
- **Prof MB Srinivas** visited Stanford University, USA in October 2016.
- **Prof Sanket Goel** visited the Kyungpook National University, Daegu, Korea under his Indo-Korea project during January, 2016.
- **Prof PK Sahoo** visited Krakow, Poland to give an invited talk on 'Kaluza-Klein dark energy model in the form of wet dark fluid in  $f(R,T)$  gravity' in the 3<sup>rd</sup> Conference of the Polish Society on Relativity held at Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, Krakow, Poland during 25-29 September, 2016.
- **Prof B Mishra** delivered a talk entitled 'Anisotropic Bianchi Type VI<sub>h</sub> Cosmological Models in Modified Gravity' in the International Conference on Cosmology on Small Scales 2016 held at Institute of Mathematics of the Czech Academy of Sciences, Prague during 21-24 September, 2016.
- **Dr Sharan Gopal** delivered a talk entitled 'A Note on Characterization of Sets of Periodic Points' in the 31<sup>st</sup> Summer Conference on Topology and its Applications held at University of Leicester, UK during 2-5 August, 2016.
- **Dr TSL Radhika** visited Department of Bio-Medical Engineering, University of Wisconsin, Madison, USA for collaborative work on Mathematical Models for Arterial Stiffness in Small / Large Animals during 3 June-15 July, 2016. This visit was funded by BITS Pilani, Hyderabad under University Immersion Scheme.
- **Prof Michael Alphonse** delivered a talk entitled 'Domination on Circulant Graphs with Two Chord Length' in the 1<sup>st</sup> IMA Conference on Theoretical and Computational Discrete Mathematics held at The Enterprise Centre, University of Derby, UK during 22-23 March, 2016.
- **Prof B Mishra** delivered a talk on 'Two Fluid Anisotropic Dark Energy Cosmological Model in Bianchi type V Space-Time' in the cosmology session of '51<sup>st</sup> Rencontres de Morindó' held at La Thuile, Aosta Valley, Italy during 19-26 March, 2016. This visit was funded by ARIES.
- **Prof PK Sahoo** visited Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan to give an invited

talk at the Yukawa International School on 'Strings and Fields' on 'Bianchi type string cosmological models in f(R,T) gravity' during 29 February-4 March, 2016 with full funding support from Kyoto University.

- **Prof B Mishra** delivered a talk entitled 'Einstein-Rosen Cosmological Model in Modified Theory of Gravity' in the 2<sup>nd</sup> International Conference on Mathematical Sciences and Statistics (ICMSS-2016) held at Universiti Putra Malaysia, Kuala Lumpur during 26-28 January, 2016.
- **Prof P Sankar Ganesh** visited National University of Singapore to present the paper titled 'Assessing Sub-lethal Effects of Gold Nanoparticles on Oxidative Stress and Neurotoxicity in Earthworm, *Eiseniafetida*' at Society of Environmental Toxicology and Chemistry Asia/Pacific 2016 Conference, held in September 2016.
- **Dr Debashree Bandyopadhyay** has presented (both oral and poster presentation) her work, 'Kolkata resisted H1N1 swine flu virus in recent past: A Bioinformatics Study' at 16th International Conference on Bioinformatics (INCOB2016), held at Singapore from 21st to 23rd of September 2016.

## Accolades

### Faculty Awards

- **Dr Anasua Guharay** was awarded with Outstanding Reviewer Recognition from the Editors of International Journal of Geomechanics, ASCE.
- **Prof D Sriram**, DBT's Tata Innovation Fellowship [April 2016-March 2019].
- **Prof MB Srinivas** received Stanford Medical School Award on 14 October 2016.
- **Prof Sanket Goel** received SERB Travel grant to present two oral papers at Photonics West to be held in San Francisco during 28 January-2 February 2017.
- **Prof B Mishra** has been selected as a Visiting Associate of IUCAA (Inter University Centre for Astronomy and Astrophysics) for a period of three years (01.08.2016-31.07.2019).
- **Prof P Sankar Ganesh** was provided Travel Grant by Society of Environmental Toxicology and Chemistry to co-chair the session on Global perspectives in Toxicological Risk Assessment of Nanoparticles in Environment in the conference in the Asia Pacific 2016 Conference held in September 2016, at National University of Singapore.
- **Prof Suman Kapur** was awarded #100 Women Achiever in Innovation Science and Technology by the Ministry of Women and Child Development, Government of India (January 2016).
- **Prof Suman Kapur** has received country-wise patent support (for UK, USA and Europe) by ICMR for glucose testing.
- Stanford Biodesign Fellowship to **Dr. Shivani Gupta**, from Prof. Suman Kapur's lab.

### Student Awards

- **Ms Sandhyabiksham Preethi Sharma**, BITS - Pilani, Hyderabad campus has been awarded the Aditya Birla Scholarship for the Academic Year 2016-17.
- **Reeti Sarkar** won a scholarship to Portland State University, OR, USA in summer 2016. She also won the 'Voice for Change' by ICFAI institute, and 'Words of a Feather' and 'Op Ed' at Pearl, BITS Pilani, Hyderabad Campus.
- **Darshan Chauhan** received an IASc-INSa-NASi Summer Research Fellowship to work at IIT Bombay in 2016.
- **K Naveen** obtained 2<sup>nd</sup> rank in ECE stream and J Shashank obtained 28<sup>th</sup> rank in Instrumentation stream in GATE-2016
- **Shirin Fathima** received DAAD fellowship for summer internship at Germany.
- **Mr Akshay Bhatnagar**, Ph.D student under the supervision of Dr. Debashree Bandyopadhyay, was awarded DBT travel grant to attend 60<sup>th</sup> Annual Biophysical Society Meeting 2016, held at Los Angeles California, USA

### Books Published

- **Guha Ray, A.**, (2016). 'Geotechnics and Applied Geology', for Gujarat Technical University, Tech-Max Publications (ISBN 978-93-5224-220-7).
- **Prof Jayanty Subbalakshmi**: Chapter 14 in Functionalized Engineering Materials and Their Applications, Apple Academic Press, CRC, Taylor and Francis Group.
- Current Developments in Mass Production of Microalgae for Industrial Applications, S. Ramachandran, P. Sankar Ganesh, V. Sivasubramanian, B. G. Prakash Kumar, Environmental Sustainability Using Green Technologies, ISBN: 9781498753050, CRC Press, Taylor & Francis, 2016.
- Dibyendu Rakshit, Santosh K. Sarkar, Kamala K. Satpathy, Palani Sankar Ganesh, Nallamuthu Godhantaraman, Jayanta K. Biswas, Diversity and Distribution of Microzooplankton Tintinnid (Ciliata: Protozoa) in the Core Region of Indian Sundarban Wetland, Clean – Soil, Air, Water 44: 9999, 1, 2016.

### Patents Published / Issued

Dr Balaji Gopalan and Dr Ramakrishnan Ganesan filed for Indian patent titled 'A METHOD FOR PREPARING CORE-SHELL NANOPARTICLES', Ref: 201611017377.

### Joining Hands (MoU)

- The **department of Civil Engineering** signed a MoU with the **Government of Telangana** in 2016 and it led to the first consultancy activity in this department. The ongoing project is titled '**Palamuru Rangareddy Lift Irrigation Scheme (PRLIS)**'.
- School of Engineering, Kyungpook National University, Daegu, Korea, January 2016.
- St Petersburg Electrotechnical University 'LETI', St Petersburg, Russia, December 2016.



## International Programmes and Collaboration Division (IPCD)

- On 8 January, 2016, Prof Venkat Allada, Vice Provost for Graduate Studies & Professor, Engineering Management & Systems Engineering and Prof James Monahan, Director, International and Cultural Affairs, Missouri University of Science and Technology, USA visited our campus to discuss about teaching and research collaborations with BITS Pilani.
- A webinar titled Master's and PhD Programs in Technology Management was conducted by Bowling Green State University on 3 February, 2016 for the students of BITS Pilani.
- On 4 February, 2016, Prof Nimal Rajapakse, Professor of Civil Engineering and Vice President of Research and International at Carleton University, USA visited our campus and signed the MoU with BITS Pilani that encourages collaborations between the two institutes, in all possible spheres (teaching, research and student & faculty exchange).
- On 17 February, 2016, International Programmes and Collaboration Division organized the EURAXESS Information Session on Research Opportunities in Europe. Ms Ainhitze Bizkarralegorra Bravo, Country Representative, EURAXESS Links India, conducted the session that covered topics such as EURAXESS Researchers in Motion, MSCA Individual Fellowships, ERC Starting Grants, EURAXESS Science Slam.
- On 18 February, 2016, Ms Rebecca Patterson, Marketing & Engagement Manager, Engineering and Architecture Programme Office, University College of Dublin, visited our campus to explore the possibilities of research collaboration between the two institutes specifically in the energy and biomedical domains.
- On 5 March, 2016, Dr Anupama Kumar, Group Leader-Contaminant Biogeochemistry and Environmental Toxicology, CSIRO Land and Water Flagship, Australia, visited our campus along with Dr Mohana Krishna Reddy Mudiam, Principal Scientist, CSIR-Indian Institute of Chemical Technology, Hyderabad to reiterate existing collaborations with Department of Biological Sciences on toxicology and to explore collaborations in allied research areas.
- On 8 March, 2016, Prof Tam Sridhar, Sir John Monash Distinguished Professor and Vice President (China and India initiatives), Monash University, Melbourne, Australia visited our campus to explore teaching and research collaborations between the institutions.
- On 12 April, 2016, there was a meeting over Telepresence with Dr. Radu Dobrin and Dr Damir Isovici, Dean, School of Innovation, Design and Engineering, Mälardalen University, Sweden, who visited BITS Pilani KK Birla Goa campus to explore possibilities of student / faculty exchanges in coming years.
- On 10<sup>th</sup> August, 2016, International Programmes and Collaboration Division organized the workshop titled 'Getting Published in the Digital Age: An Author Workshop' in collaboration with Taylor & Francis Group for research scholars and faculty members.
- On 5 August, 2016, Prof BVR Chowdari, Senior Executive Director, President's Office, Nanyang Technological University, Singapore visited our campus and gave talks to faculty and students on 'NTU's Approach to Academic and Research Excellence' followed by discussion with IPCD on student mobility to NTU under NTU-India Connect program.
- Prof Paul L Bishop, Associate Dean for Research, College of Engineering, University of Rhode Island, USA, was with us as Fulbright Specialist from 22 October to 2 December, 2016. The basic purpose of his visit was to improve engineering education and research. He met faculty from all the departments and discussed about research collaborations. He presented a teleconference seminar on ABET accreditation and gave a series of distinguished lectures on Principles of Water Reclamation and Reuse.
- On 10 November, 2016, Dr Sunny Shah, Assistant Director, ESTEEM Graduate Program and Senior Scientist, Chemical and Biomolecular Engineering, University of Notre Dame, USA visited the campus and delivered a talk to the students on Entrepreneurship.
- On 18 November, 2016 EURAXESS Links India in collaboration with BITS Pilani and other institutions organized the Fourth EURAXESS Science Slam at BM Birla Science Centre, GP Birla auditorium, Adarsh Nagar, Hyderabad. The event promised to be an evening of science and fun plus Networking among researchers from various parts of the city and the country.

- On 20 November, 2016, a delegation from University of Missouri – Kansas City, led by Dr Kevin Truman visited the campus and gave a talk to the students on Scholarship Opportunities at UMKC.
- Prof KR Thampi, Vice Principal, Internationalisation Engineering & Architecture, University College of Dublin was with us as Scholar-in-Residence from 20-26 November, 2016. His visit was part of the MoU signed between BITS and UCD. Prof Thampi visited Departments of Mechanical, Chemical, Civil, Chemistry and Physics. He delivered talks to the faculty and students and discussed with IPCD for teaching and research collaborations.
- On 28 November, 2016, Prof Anil K Mehrotra, Department of Chemical and Petroleum Engineering, Schulich School of Engineering, University of Calgary, Canada, and a BITS alum (BE ChemEngg, 1972), visited our campus to explore the possibilities of research collaborations and to include BITS Pilani as a member of Shastri Indo-Canadian Institute.
- On 8 December, a delegation from Cardiff University, UK, led by Prof Dylan Jones, Pro Vice Chancellor, Dr Phil Stephens, Dean of International, Dr Peter Kille, Dr John Chester and Dr Shantini Paranjothy visited our campus. They had detailed discussions with faculty teams across all the four campuses of BITS Pilani in the focused areas of population health, cancer and integrative biosystems for collaborative research. Later the team met with IPCD team for student and faculty mobility.
- On 16 December, Prof Subhas Mukhopadhyay, Professor of Mechanical / Electronics Engineering, Macquarie University, Sydney visited the campus and delivered a talk on Internet of Things and Wireless Sensor Network for Health and Home Management to faculty and students. His visit was part of the MoU signed between Macquarie University and BITS Pilani for faculty and student exchange for teaching and research.
- Assistance for off-campus thesis: Four students were provided partial finance support to pursue their off campus thesis at Technion International, Israel Institute of Technology, Israel, ETH, Zurich, Switzerland, Harvard University, USA and University of Wisconsin, UW at Madison, USA.



*Prof Paul L Bishop, Fulbright Specialist and Associate Dean for Research, College of Engineering, University of Rhode Island, USA*



*Delegation from Cardiff University, UK led by Prof Dylan Jones, Pro Vice Chancellor*



*Prof Nimal Rajapakse, Professor of Civil Engineering and Vice President of Research and International at Carleton University, USA, handing over the MoU to then Acting Vice Chancellor, Prof VS Rao*



*Prof Subhas Mukhopadhyay, Professor of Mechanical/Electronics Engineering, Macquarie University with Prof G Sundar, Director, BITS Pilani, Hyderabad Campus*



## Distinguished Lectures and Guest Lecture Series

Presenter	Details of the Talk	Department	Date
Dr Bade Simhachalam, Sr GM, Murugappa Group	Role of Engineer: Relevance of Engineers in Automotive and Aerospace Sectors	Mechanical Engineering	2 February 2016
Ms KV Kalyani	On Cement Manufacture – Process and Energy Perspective	Chemical Engineering	8 February 2016
Dr RMVGK Rao	Polymer Matrix Composites – Opportunities for Chemical Engineers as Inter facial Engineers	Chemical Engineering	15 February 2016
Prof Amit Sheth	Search Engine Basics to Semantic Search	Computer Science	16 February 2016
Dr Debasis Chakraborty, Technology Director, DRDL, Hyderabad.	Numerical Simulation for Aero Propulsive Characterization of Missiles	Mathematics	4 March 2016
Dr Kumar N Shivarajan, CTO Tejas Networks, Bangalore	Future of Communication	EEE	9 March 2016
Mrs Sharada Prabhakar Scientist 'F' DRDO	Composite Product Development	Mechanical Engineering	1 April 2016
Prof RN Biswas, Visiting Faculty in the Department of Electrical Engineering at Shiv Nadar University, Noida	Convergence of Technologies – The key to future Engineering	EEE	30 May 2016
Dr VR Reddy Marthala	Conventional zeolites and Hierarchical Materials for Methanol to olifine and biotransformation	Chemical Engineering	22 August 2016
Prof Sanjit Mitra and Prof Rana Adhikari, Inter University Centre for Astronomy & Astrophysics	'Internship and Collaboration Opportunities with LIGO-India'	Physics	22 August 2016
Dr DV Ramana Rao	Advances in size reduction operations in process industries	Chemical Engineering	29 August 2016
Mr SG Anil Kumar, CEO, Samunnathi Financial Intermediation and Services Pvt. Ltd.	Microfinance	Economics and Finance	30 August 2016
Dr Chebrolu Pulla Rao, Department of Chemistry, Indian Institute of Technology Bombay	Protein – inorganic hybrid nanomaterials	Chemistry	31 August 2016
Dr Raj Kumar Gondle, UMASS-Lowell, MA, USA	Application of finite element modeling to real-time civil engineering problems. He explained a study on coupled multiphase fluid flow and geomechanical modeling of carbon dioxide (CO <sub>2</sub> ) injection in an unmineable coal seam at a field sequestration site, and field monitoring of ground surface deformations by using high-precision tiltmeters and GPS units.	Civil Engineering	August 2016
Mr Sunil K Daga, Founder, Enrich Investments	Investor Insights	Economics and Finance	23 September 2016
Col Sunil Tewari, Commander Works Engineer (Air Force)	Strengthening and Maintenance of Airfield Pavements as a part of the course CE F 425. He shared some of the case studies from his experiences on evaluation of Defence Airfield pavements.	Civil Engineering	September 2016

Presenter	Details of the Talk	Department	Date
Mr Ravi Kiran from BASF	Admixtures for advanced concrete. He explained in detail the different types of admixtures and their applications in civil engineering construction	Civil Engineering	September 2016
Prof Amitabha Chattopadhyay, CCMB, Hyderabad	Biomembranes: Where Physics, Chemistry, Biology and Medicine Meet	Chemistry	14 October 2016
Prof Susanta Mahapatra, HCU, Hyderabad	Nonadaibatic Chemical Dynamics	Chemistry	26 October 2016
Dr Paul Bishop, Dean of Engineering Sciences at University of Rhode Island	Educational Development in Engineering	EEE	7 November 2016
Prof Dario Darji, University of Louisville, USA.	Dynamics on Cantor Set	Mathematics	7 November 2016
Prof Arnab Bhattacharya, Tata Institute for Fundamental Research, Mumbai	'How to give a bad talk'	Physics	17 November 2016
Prof Arnab Bhattacharya, Tata Institute for Fundamental Research, Mumbai	'Let there be Light'- from oil lamps to LEDs	Physics	17 November 2016
Mr Albert Greenberg	Hyperscale Networking in Microsoft Azure	Computer Science	18 November 2016
Dr Vijayabaskar Narayanamurthy, Scientist, DRDO	Design, Development and Qualification of a Dome Opening Mechanism for flight vehicle	Mechanical Engineering	18 November 2016
Prof Ravindranathan Thampi, School of Chemical and Bioprocess Engineering, University College Dublin, UK	Organic and Inorganic materials for solar cells	Chemistry	22 November 2016
Prof Ravindranathan Thampi, Professor. School of Chemical and Bioprocess Engineering, University College Dublin	Recent research progress in renewable energy conversion and storage - Hydrogen production and energy storage	Mechanical Engineering	23 November 2016
Prof Upadrasta Ramamurthy	3D Printing of Metals: Challenges and Opportunities	Chemical Engineering	24 November 2016
Prof. Rakesh Kumar	MTA1 Master Coregulator in Cancer and Beyond	George Washington University, USA	20 February 2016
Dr. Suresh Arya	Synthetic Biology, HIV/AIDS	NCI, NIH, USA	13 to 16 February 2016
Prof. Abhijit Chakrabarty	Clinical Proteomics of Hemoglobin Disorder	Saha Institute of Nuclear Physics	26 August 2016
Dr Souvik Maithy	Chemical Tools to Silence microRNA: Opportunities and Challenges	Institute of Genomics and Integrative Biology	5 November 2016



## Invited Lectures by Faculty

Name of the Faculty Member	Title of the Lecture (L) / Workshop (W) and Occasion (if any)	Institution in which it was delivered / conducted	Duration / date (month date (-date). Year)
Dr Sudatta Banerjee	A Comparative Study of Determinants of Quality of Education in Private and Government Schools: A Case Study of the Schools of Burdwan, West Bengal	52 <sup>nd</sup> Annual TIES Conference held in IIM Kozhikode, India	4-6 January 2015
Dr Swati Alok	A Survey on Financial literacy of Indian Youth: A Study on Hyderabad-Secunderabad Twin Cities	52 <sup>nd</sup> Annual TIES Conference held in IIM Kozhikode, India	4-6 January 2015
Dr Kishore Kumar N	Tensor Decompositions	Department of Mathematics, LNMIIT, Jaipur	5 January 2016
Prof Sanket Goel	Microfluidic Devices for Biomedical Applications	BITS-Pilani, Hyderabad Campus, Hyderabad	5 January 2016
Prof Sanket Goel	3D printed Microfluidic/Lab-on-a-chip for various Biochemical applications	School of Mechanical Engineering, Kyungpook National University, Daegu, Korea	11 January 2016
Prof Sanket Goel	Microfluidic/Lab-on-a-chip for various Biochemical applications	School of Mechanical Engineering, KAIST, Daejeon, Korea	13 January 16
Dr RB Adusumalli and Dr Karthik Chethan	Characterization of PAN Carbon fiber thermoset Composites	ISAMPE National Conference on Composites, organized by DRDO	22 January 16
Dr Sowmya J	Emerging Trends in Microprocessors and Embedded Systems	Vasavi College of Engineering, Hyderabad	17 February 2016
Prof N Rajesh	Tuning the properties of biopolymers for remediation of heavy metals from industrial effluents,	Sixth International Conference on 'Metals in Genetics, Chemical Biology and Therapeutics (ICMG-2016)' held at Indian Institute of Science, Bangalore	17-20 February 2016
Prof Sanket Goel	Microfluidic Devices for Biochemical applications	Mahindra Ecole Centerle, Hyderabad	25 February 2016
Dr Sujith	Non-destructive evaluation for damage tolerant design	Vizag Steel Plant, Vishakapatnam	25 & 26 February 2016
Dr Anasua GuhaRay	Slope Instability and Stabilisation Methods	Malla Reddy Engineering College, Hyderabad	3 March 2016
Prof Sanket Goel	MEMS Based sensors – Design, fabrication and Characterization (two sessions)	Madhav Institute of Technology and Science (MITS), Gwalior, India	5 March 2016
Dr Sujith	Shape Memory Alloys	National Seminar on Smart Materials (UGC), Trivandrum	9 March 2016
Prof Sridhar Raju	Long Lasting Pavements/ Key Note Speaker	Conference on Sustainable Asphalt Pavements for Developing Countries	12 March 2016
Prof PK Sahoo	Big Rip singularity of LRS Bianchi type-I universe in f (R,T) gravity / Frontiers in High Energy Physics	Institute of Mathematical Sciences, Chennai	22-25 March 2016
Prof Srikanta Dinda	Functional polymer for coating applications	EMN Meeting-Dubai	2 April 2016
Prof D Sriram	Drug development strategy for latent tuberculosis infection	CSIR-IICT, Hyderabad	4 April 2016
Dr Sujith	Energy Storage in Porous Ceramics	Synopsis, Biology Department, BITS Pilani Hyderabad Campus	13 April, 2016
Dr Kishore Kumar N	Tensor Decompositions and Applications	Defense Institute of Advanced Technology, Pune	19 April, 2016

Name of the Faculty Member	Title of the Lecture (L) / Workshop (W) and Occasion (if any)	Institution in which it was delivered / conducted	Duration / date (month date (-date). Year)
Prof Sanket Goel	Triboelectric Nanogenerator	Biological Science Department, BITS-Pilani, Hyderabad Campus	22 April, 16
Prof Sridhar Raju	Plastic Waste in Road Construction, Advantages & Economic Considerations/ Half Day Seminar on Solid Waste Management	The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI)	13 May, 16
Prof N Rajesh	Biopolymer-ionic liquid interactions in environmental remediation	Japan Advanced Institute of Science and Technology, Japan	14-19 May, 2016
Dr Anupam Bhattacharya	Selective Zn <sup>2+</sup> & F-detection with fused pyrrolo-quinoline systems: Importance of pyrrole	National Conference on Recent Developments and Applications in Chemical Sciences, NIT-Agartala, Tripura	20-21 May, 2016
Dr Kishore Kumar N	Finite element methods / Advanced Training Programme on Partial Differential Equations	BITS - Pilani Hyderabad Campus	25 May-14 June, 2016
Dr Swati Biswas	Smart nanocarriers for drug delivery	Jadavpur University, Kolkata	27-May-16
Dr Subhas Ghosal	Ultracold Molecules – its Formation, Reactive Collisions and promising Applications	World Congress of Advane Materials (WCAM 16) in Chongqing, China	4-6 June, 2016
Dr Runa Kumari	Possible Realization of Dielectric Resonator Antenna in	NIT Rourkela	6 June, 2016
Dr Sabareesh	Understanding stationary and translating vortex flows and challenges in its laboratory simulation	Iowa State University, USA	13 June, 2016
Dr Sabareesh	Effects of non-dimensional governing parameters on building internal and external pressures under a tornado-flow	Texas Tech University, USA	15 June, 2016
Prof Chittaranjan Hota	Self-care healthcare using IoT and Bigdata analytics	Indo-Norwegian ICT workshop conducted at International Institute of Information Technology (IIIT), Hyderabad	21-22 June, 2016
Prof A Ramu	Innovative Pedagogy for Teaching and Learning Engineering Mathematics	JNTUH, Hyderabad	29-30 June, 2016
Dr Anil Nemili	Development and application of an accurate adjoint approach for optimal active flow control / Airbus Flight Physics – Indian University Meet	Airbus India, Bengaluru, India	8 July, 2016
Prof N Rajesh	Sustainable adsorbents for environmental remediation-An overview,	International conference on recent advances in chemistry and chemical engineering ICRAE-2016 at JNTUH, Hyderabad	11-13 July, 2016
Prof B Mishra	Anisotropic Dark Energy Cosmological Models / National Conference on Recent Trends in Mathematics 2016	Tata Institute of Social Sciences, Tuljapur	15-16 July, 2016
Dr RB Adusumalli and Dr Karthik Chethan	Characterization of Fibre-Matrix interface in Advanced Composites	CEP Training program on 'Recent Advances in Aerospace Composites, ASL Auditorium, Hyderabad	25 July, 2016
Dr Anil Nemili	Accurate and robust adjoint approach for aerodynamic optimization of unsteady turbulent flows / 18thAeronautical Society of India (AeSI) CFD Annual Symposium	National Aerospace Laboratory, Bengaluru, India	10-11 August, 2016
Prof Sanket Goel	Review on CardioWest Total Artificial Heart	MediCiti Institute of Medical Sciences, Hyderabad, Katriya Hotel, Hyderabad	15 August, 2016



Name of the Faculty Member	Title of the Lecture (L) / Workshop (W) and Occasion (if any)	Institution in which it was delivered / conducted	Duration / date (month date (-date). Year)
Prof Manab Chakravarty	Friedel-Crafts Reactions of Benzylic Phosphates: Access to Polyarylated Alkanes at Room Temperature	International Conference on Stereochemistry-2016, Sao Paulo, Brazil	18-19 August, 2016
Prof Sanket Goel	From bench to field – Evolution of Micro-Devices in diverse domains	Instrument Society of India and IEEE, Green Park Hotel, Hyderabad	23 August, 2016
Prof Sridhar Raju	Water Transport Engineering	Vignana Bharathi Institute of Technology, Hyderabad	24 August, 2016
Dr Rishi Kumar	Presentation of paper "Local Governance in Tribal Dominated Areas-Improving Inclusiveness? A Case Study"	10 <sup>th</sup> ICSSR-NRCT joint seminar on "Democracy and Governance in India & Thailand"	6-7 September, 2016
Dr Mini Thomas P	Impact of Services Trade on India's Economic Growth and Current Account Balance: Evidence from post-reform period	6th Annual Research Conference of Maastricht School of Management, Netherlands.	9 September, 2016
Dr C Hussain Yaganti	Delivered Lecture on "Predictive content of Futures Prices in Commodity Markets"	Workshop on Applied Financial Econometrics, University of Hyderabad	19-23 September, 2016
Prof Vijaya B Marisetty	Market Microstructure	Workshop on Applied Financial Econometrics, University of Hyderabad	19-23 September, 2016
Prof Sanket Goel	Towards Energy self-reliant and self-sustained India: Fostering Partnership between 3Ps – Public, Private and People	PRS University, Raipur	24 September, 2016
Dr Anasua GuhaRay	Computational Modeling in Geomechanics	VR Sidhhartha Engineering College, Vijayawada	03 October, 2016
Mr Kalyana Rama JS	Computational Modeling in Solid Mechanics	VR Sidhhartha Engineering College, Vijayawada	03 October, 2016
Dr Alivelu Manga Parimi	Delivered Key note address in the National Conference on Recent Innovations in Electrical Engineering	Malla Reddy College of Engineering, Hyderabad	21 October, 2016
Mr KCS Murti	Modern trends in Embedded systems	VIT, Vellore, India	October, 2016
Dr Manish Kumar	Vector Calculus and its Applications in Engineering	Department of Mathematics, School of Advance Sciences, VIT University, Vellore	5 November, 2016
Prof Sanket Goel	Microfluidic devices for Biomedical and Energy Applications: Recent trend	Department of Biosciences and Bioengineering, IIT Guwahati	5 November, 2016
Prof Sridhar Raju	Pavements using Falling Weight Deflection and Benkelman Beam Guidelines for Structural Evaluation for Strengthening of Flexible	Indian Academy of Highway Engineers (IAHE)	11 November, 2016
Dr Mini Thomas P	Impact of Services Trade on India's Economic Growth and Balance of Payments: An Alternative Approach	14 <sup>th</sup> Development Dialogue at International Institute of Social Studies (ISS), Hague, Netherlands.	21-22 November, 2016
Dr Surya Shankar Dan	Recent Trends in Nanoelectronics	St Francis College for Women, Hyderabad	26 November, 2016
Dr Amit Nag	Gold nanoparticle induced enhancement of molecular fluorescence for Zn <sup>2+</sup> detection in aqueous niosome solution, The International Conference on Fiber Optics and Photonics (PHOTONICS 2016)	IIT Kanpur, India	4-8 December, 2016
Prof Vijaya B Marisetty	Can Political Connections Help Nation Building in Emerging Markets? Evidence from Public-Private Partnerships in China and India	7 <sup>th</sup> Emerging Markets Finance Conference, Mumbai, India	13-17 December, 2016

Name of the Faculty Member	Title of the Lecture (L) / Workshop (W) and Occasion (if any)	Institution in which it was delivered / conducted	Duration / date (month date (-date). Year)
Dr Durba Roy	Investigating the disulfide bond isoform equilibrium in a venom-peptide by classical and replica exchange molecular dynamics.	Theoretical Chemistry Symposium, Univ. of Hyderabad, India	14-17 December, 2016
Dr Subhas Ghosal	Ultracold Molecules – its Formation, Reactive Collisions and promising Applications	Theoretical Chemistry Symposium, University of Hyderabad, India	14-17 December, 2016
Dr Swati Biswas	Micellar Nanomedicines for Cancer Treatment	Dr Reddy's Laboratories, Hyderabad	16 December, 2016
Dr Sudatta Banerjee	Effect of Personality traits on Facebook Behaviour	53 <sup>rd</sup> Indian Econometric Society Conference at (NISER), Khordha, Odisha, India	22-24 December, 2016
Dr C Hussain Yaganti	An analysis of time to maturity and volume effects on volatility: Commodity Futures Markets	53 <sup>rd</sup> Indian Econometric Society Conference at (NISER), Khordha, Odisha, India	22-24 December, 2016
Dr Archana Srivastava	Testing of Stolper-Samuelson Theorem for India – A Translog Production Function Approach	53 <sup>rd</sup> Indian Econometric Society Conference at (NISER), Khordha, Odisha, India	22-24 December, 2016
Dr Thota Nagaraju	Does A Debt Relief Lead To Increased Precautionary Savings Evidence From A Policy Experiment	53 <sup>rd</sup> Indian Econometric Society Conference at (NISER), Khordha, Odisha, India	22-24 December, 2016
Dr Thota Nagaraju	Evaluating Concentration, Competition, Efficiency and their relationship in the Indian banking sector since 1980	Indian Economic Association's 99 <sup>th</sup> Annual Conference at SV University, Tirupathi.	27-29 December, 2016
Dr Souvik Kundu	Functional Oxides Integration on Semiconductor for Memory Applications	IIT Bombay	27-30 December, 2016
Dr Swati Alok	The Big Five personality dimensions and Facebook behaviour: A study on Indian youth	26 <sup>th</sup> Annual Conference of the National Academy of Applied Psychology at IIT Madras	29-31 December, 2016
Prof KN Mohan	Keynote Address: Techniques for identification of copy number variants in the human genome Workshop on 'Multiplex Ligation dependent Probe Amplification and its Application"	Thyagarajar College Madurai	21 & 22 January, 2016
Prof KN Mohan	Copy number variants of unknown significance: Role of 15q11.2 CNVs in neuropsychiatric disorders and other abnormal phenotypes	Institute of Genetics, Hyderabad (New Frontiers in Diagnosis and Management of Genetic Diseases)	29 January, 2016
Prof KN Mohan	Variants of Uncertain Significance: The conundrum of 15q11.2 CNVs.	NISER Bhubhaneshwar	14 November, 2016
Prof P Sankar Ganesh	Toxicology in the era of nanotechnology, National Conference on Recent Advances in Biotechnology	Sreenidhi Institute of Science and Technology, Hyderabad	20 October, 2016
Prof P Sankar Ganesh	Novel challenges posed by emerging contaminants on bioprocessing of wastewater: Implications of engineered nanoparticles, &quot;Advances in bioprocess engineering-practical approach for today's bioprocess challenges.	Kasturba Gandhi Degree & PG College for women, Hyderabad	25 November, 2016



## Sponsored Research Projects

SI No	Project Name	Principal Investigator	Funding Agency	Department	Sanctioned Amount (Rs)	Duration
1	Role of interleukin 22 in diabetic wound healing and regeneration	Dr Onkar kulkarni	DST	Pharmacy	2726000	3 years
2	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring	Dr GR Sabareesh	DST	Mechanical Engg.	2604000	3 years
3	Advancing host-directed therapy for tuberculosis/ MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof D Sriram	DBT-Tata Innovation	Pharmacy	2700000	3 years
4	"Design and Thermal Analysis of Electronic Controller Mounted on Disc"	Prof Jeevan Jaidi	M/s HBL Power Systems Ltd.,	Mechanical Engineering	249997	6months
5	Simulation and Modelling to Minimize Porosity level in Aluminum Castings by Ultrasonic Stir Casting	Prof NSK Reddy	L & N Structural Engineers (P) Ltd	Mechanical Engineering	803200	3 years
6	"Analytical development studies for pharmaceutical products"	Dr VV Vamsi Krishna	Intera Healthcare Private Limited	Pharmacy	1830855	2years
7	Frequency Estimation in Wideband receivers with under sampling	Prof Yoganandam	DLRL	EEE	999413	9months
8	Screening of immunoglobulin gene sequences of interest	Prof Suman Kapur	Consultancy Project	Biological Sciences	563886	6month later extension
9	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Prof Amit Kumar Gupta	DRDO	Mechanical Engineering	4560000	3 years
10	Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin	Dr Balaram Ghosh	SUN Pharma Advanced Research Company Ltd.	Pharmacy	2900000	2years
11	Development of an encryption algorithm for secure transmission of color images	Dr Manish Kumar	DST	Mathematics	1508053	3 years

SI No	Project Name	Principal Investigator	Funding Agency	Department	Sanctioned Amount (Rs)	Duration
12	Regenerating Tank systems for enhanced livelihoods: An evaluation of Mission Kakatiya (MK) project in Telangana	Dr Srinivas Sajja	ICSSR	Humanities & Social Sciences	30000	3 months
13	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Dr Balaram Ghosh	Reddy's Lab	Pharmacy	900000	3 years
14	Performance evaluation of backfill soils partially replaced with building derived materials	Dr Anasuya Guhary	DST	Civil Engineering	2443710	3 years
15	'Hydrogen storage in mesoporous polymer derived ceramics for automotive applications	Dr Sujith R	DST	Mechanical Engg	4238240	3 years
16	Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements	Prof Puna Rao & Prof Shrikant Charde	Shahsi Phytochemical Ltd	Pharmacy	574560	2 years 4 months
17	Synthesis of iron oxide nanoparticles for propellant fuel applications	Dr Balaji Gopalan	Premier Explosives Limited	Chemistry	1215000	1 year
18	Functional role of histone deacetylase 5 (HDAC5) in the pathogenesis of chronic kidney diseases and renal fibrosis	Dr Onkar Kulkarne	DBT	Pharmacy	7016800	3 years
19	Maintenance of sanitation and solid waste management for swachh Andhra Pradesh	Dr Sankar Ganesh	Ascent Leadership & Management Consultants (P) Ltd,	Biological Sciences	350550	7 months
20	Investigation on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp.ABS-36 for the treatment of renal injury	Prof Sajeli Begum	DST	Pharmacy	2439363	3 years



## Off-campus Programmes and Industry Engagement

The Off-campus team has been growing over the last few years with the addition of several faculty members as well as industry professionals in non-teaching roles. This year, with an aim to strengthen the Operations teams in both WILP and PS, we welcomed Mr Pradeep Singhdeo as Deputy General Manager, Operations for WILP operations across India, and Mr Varun Singh as Manager, Operations for Practice School across the campuses. Both of them are stationed at the Hyderabad campus.

### People Matters Learning and Development Annual Conference

In October 2016, WILP co-sponsored the People Matters Learning and Development Annual Conference in Delhi. The conference was an excellent opportunity for BITS Pilani to engage with HR and L&D professionals paving the way for knowledge-sharing and partnering opportunities in future.

The conference began with a pre-event on 19 October with senior L&D leaders. Prof S Gurunarayanan, Dean WILP released a white paper on industry trends in Learning and Development, Organizational Development and Capability Building based on a survey conducted by WILP. The main conference on 20 October was attended by over 500 middle and senior level HR practitioners from across industries and cities. Prof PB Venkataraman, Associate Professor from our Bangalore Centre delivered a talk on 'Innovative Learning Models' along with Ms Katarina Karalic (L&D Leader - India & Middle East, P&G). The session witnessed a large audience, and drew upon the findings of the survey, and WILP's experience in delivering impactful learning solutions to industries and professionals.

### Online Applications in WILP

The Application Centre is a new online application portal custom-made for WILP. It was launched for the 2016 admission cycle for Cluster Programmes. The portal handles the entire process from making an application to making fee payments, and reviewing and shortlisting of candidates. It has helped simplify the logistics of handling applicant documentation, and has also brought in transparency into the process as the status of the application can be seen online by prospective students anytime. The application has been used successfully for admission to cluster programmes and non-specific programmes.

### Faculty Development Initiatives

In May 2016, a workshop called Total Quality in the Classroom was delivered by Prof Rajiv Gupta, an Adjunct Professor in WILP with over 30 years of experience in manufacturing, management consulting and teaching. The workshop covered the five basic elements of course preparation and delivery, i.e., planning the course, designing the course, delivering the course, assessing student performance, and continual improvement. Twenty faculty members attended this workshop in the Hyderabad campus.

A number of workshops on laboratory simulation software were conducted during the year to enable faculty members to incorporate experiential learning in their courses. These included a workshop on Zcastpro, Afdex and ZCNC in May 2016, one on Prodyn in August 2016, and one on Flownex and Flowvision in November 2016.

Towards the end of the year, with the help of Dr Annapoorna Gopal, one of our new Off-campus faculty members with several years of experience in Learning and Development, a structured approach to faculty development was adopted. The goal of this programme is to continuously enhance the quality of WILP and PS programmes (content and delivery) through academic interventions and sharing of best practices among faculty. The programme consists of a series of workshops with well-defined objectives and learning outcomes. Some of the courses under the Faculty Development Programme include Learner Centered Approach to Teaching, Assessments for Learning Purposes, Ethics, Authoring Digital Content, Facilitating Learning in Technology Enabled Mode, etc.

The first workshop of this series was conducted on 21 and 22 December, 2016 in the Hyderabad campus. It focused on understanding the BITS way of education, learner centered approach to facilitation and assessments. It was delivered by Prof Annapoorna Gopal along with a Group Leaders and Associate Deans – WILP, and was attended by eleven faculty members.

### Practice School - Hyderabad Campus

In Summer 2016, a total of 704 Hyderabad campus students attended PS I across 155 stations. PS II was offered through 106 stations in Semester I (2016-17) and is operating through 121 stations in Semester II. The average

stipend is Rs 22,000. The number of students receiving pre-placement offers through PS II (Semester I) increased from 9% to 12% this year, with an average compensation of Rs. 14.8 lacs per annum.



## Workshop on ELT in Classroom

Department of Humanities & Social Sciences, BITS Pilani Hyderabad Campus, in collaboration with ELT@I Hyderabad Chapter, organized a two-day international workshop titled ELT IN THE CLASSROOM: ACADEMIC AND PROFESSIONAL PERSPECTIVES on 30 April - 1 May 2016. Coordinated by Prof MG Prasuna, the Head of the Department, and Dr. Santosh Mahapatra, a faculty member, the workshop aimed to enhance the professional ability of English language teachers working in degree colleges. Around forty teachers from different colleges in Telangana and Andhra Pradesh participated in the workshop. Prof Paul Gunashekar, Prof Julu Sen and Dr Kshema Jose from the English and

Foreign Languages University, Prof Sunita Mishra from the University of Hyderabad, Blaire Creamerhart, an English Language Fellow (Regional English Language Office, US Embassy, New Delhi) at Hyderabad, Sarah Koshy, a trainer working for British Council, Avinash Chimote, a business manager with Genpact, Shubham Das, a professional working in the field of educational technology and Mr Adi Babu, an experienced trainer at TIMES, were the resource persons for the workshop. The workshop was divided into four major areas:

- Technology for language teaching – accessing and utilising resources
- Teaching English language through prescribed texts – exploring the challenges and scope
- English language skills for placements – understanding the needs of the industry
- English for competitive examinations – exploring opportunities of integration in the classroom



## RFID technology and Self check-in and check-out facility @ BITS Pilani Hyderabad campus Library

On Saturday 30 July, RFID (Radio-frequency identification) technology and self check-in and check-out facility was inaugurated in the library by Prof G Sundar, Director, BITS, Pilani Hyderabad campus. The introduction of this technology has enabled faculty and students to borrow and return materials whenever the library is open. No time restriction for book issues and returns. Self-service facilities also allow for a much faster and more efficient way of borrowing and returning books. The key benefits of RFID Technology in our library are:

- Quick & Efficient Circulation Operations
- Enhanced Security for Library Items
- Seamless Inventory Management
- Emerging Technology Experience for Library users



## BITS Pilani Ranked 9<sup>TH</sup> Top University by National Institutional Ranking Framework (NIRF)

The Ministry of Human Resources and Development on Monday 4 April 2016 released a list of top 10 educational institutions in the country under the National Institutional Ranking Framework (NIRF) a first-of-its-kind indigenous ranking framework. BITS Pilani has ranked 9<sup>th</sup> Top University and it is the only private university ranked among the top ten Indian universities.

This is the first time that the exercise of compiling rankings for various institutions has been undertaken by

the government. An independent agency, the National Bureau of Accreditation, working with the government was responsible for validating the data submitted by the institutions.

The Acting Vice Chancellor, Prof VS Rao has received the award from Smt Smriti Irani, the Hon'ble Union Minister for HRD, who released the 'India Rankings 2016' at Vigyan Bhawan, New Delhi.



## Campus Life: Community Welfare

The campus community celebrated a week long Ganesh Puja. New Year and Saraswathi Puja on the stage in Children's Park. The celebrations ended with cultural performance by kids and adults in the community.

Professionals visit the campus to teach musical instruments, classical dance, classical music and Yoga. Sports and games competitions were organized for community members in the campus.



*International Women's Day Celebrations*



*Ganesh Festival Celebrations*



*Saraswathi Puja*

## Independence Day Celebrations



## Arena

ARENA, the annual sports festival of BITS-Pilani Hyderabad campus was formally inaugurated on 28 January 2016 by Dr Tripuraneni Hanuman Chowdary, The former IT Advisor to Government of Andhra Pradesh. Acting Vice-Chancellor Prof VS Rao presided over the function. ARENA was launched to bring out the sporting spirit in students from different parts of the country, and to create an opportunity for them to take part in various sporting events, over a period of three days. Arena'16 saw over 3000 participants from all across the nation participating in many indoor and outdoor sports events, held for both boys and girls. The fest offers a comprehensive entertainment and sportive atmosphere in campus.



## ATMOS

The ATMOS 2016, the National Techno-Management fest of BITS, Pilani – Hyderabad Campus, was inaugurated on Thursday 13 October 2016 by Dr Tessy Thomas, Project Director of Agni – V, DRDO, Hyderabad. Prof G Sundar, Director presided the inaugural function. ATMOS spanning over 3 days from 14 October brought a plethora of exciting contests, workshops, lectures and much more. Over 15000 students from all over India participated in ATMOS'16.



During the inaugural function, Prof S Venkateswaran Faculty Excellence Award for 2015 has been awarded to Prof P Yogeeswari for her immense contributions to education and to the institute, by the Chief Guest Dr Tessy Thomas.





## Convocation '16



The Birla Institute of Technology and Science (BITS) Pilani, Hyderabad Campus held the convocation ceremony for its graduating students of 2016 batch. *Dr S Christopher, Secretary, Department of Defence Research and Development & Director General, DRDO* graced the occasion as the Chief Guest and was joined by Vice-Chancellor, Prof Souvik Bhattacharyya, Director – Hyderabad campus, Prof G Sundar, along with the senate members, faculty, and staff. The state-of-the-art auditorium was filled with excitement and enthusiasm of the graduating students, their parents, faculty and staff.

Six hundred and seventy five graduating students of First Degree, 60 of Higher Degree and 30 of Ph.D Programmes were awarded degrees on the occasion. Mr Aditya Chandrasekar, Mr A Sai Darshan and Ms P Sarguna Janani were awarded Gold, Silver and Bronze medals respectively for their outstanding academic achievements.

Chancellor, **Dr Kumar Mangalam Birla**, in his message, encouraged the graduating students to stay focused and cultivate self-confidence. He further added, 'I want you to

reflect on how privileged you are, and how you must seize the opportunities this education has opened up for you. There is a French phrase 'noblesse oblige'. It literally means 'nobility obligates': that those who are privileged have an implicit obligation to those who are less privileged, and to the larger society and world around."

The **Chief Guest, Dr S Christopher**, emphasised on the need of sustainable development and the challenges associated with it. 'Being a scientific community, let us make a positive difference to the future of the society and the health of the planet,' he said. While wishing the graduating students good luck in life, he encouraged them to empower the nation with their education and advised them to always aspire for deepening and broadening their knowledge.

Presenting his annual report and sharing the future roadmap for the University, **Vice Chancellor, Prof Souvik Bhattacharyya**, said that BITS Pilani's industry engagement programmes like the Practice School and the Work Integrated Learning Program (WILP) are corner stones of the educational philosophy of BITS. 'BITS Pilani values







work experience as a significant element of student learning and helps students discover how they learn via work experience.' With over 400 research-focused faculty members joining, the Research Seed Grant Scheme has been revised to help them compete with the very best in India.

**Director, Prof G Sundar**, reviewed the achievements of BITS Pilani, Hyderabad Campus during the academic year 2015-2016, bringing to light the various opportunities provided to its students and faculty. He mentioned that the campus is not only committed to achieving excellence in research and development but also keen on promoting innovation and

entrepreneurship. Conveying his wishes to the graduating students, he said, 'Our endeavour is that the education in this institute will have prepared you to face the challenges ahead with confidence, to serve your chosen professions, the nation, and humanity with distinction, and serve as a strong foundation for lifelong learning in this rapidly changing world.'

Prof G Ravindra Kumar, Senior Professor at the Department of Nuclear and Atomic Physics, Tata Institute of Fundamental Research (TIFR), Mumbai received the Distinguished Alumnus Award 2016.





## Pearl 2016

The ceremony began on an auspicious note with the recital of Saraswathi Vandana followed by lamp lighting ceremony. The formal inauguration then started with the FOB Members and Club Secretaries being invited on the stage. Then came the welcome addresses by the cultural Secretaries, and the SU President, Mr Prudhvi Potluri. Prof MB Srinivas, Dean, administration, and Prof G Sundar, Director, Off-Campus Programmes and Industry Engagement then addressed the audience. The guests of honour Mr Prasad Devineni and Mr Sudhakar, delivered an inspiring inaugural address which was followed

by the felicitation of the guests with mementos. The formal inauguration concluded with the vote of thanks by the General Secretary of the SU, Mr Kaushal Raut.

The pearl inaugural ceremony kicked off with a bang with the music club bringing an amazing melody, mesmerizing the audience.



## Introducing New Faculty (1 January – 31 December 2016)

S. No.	NAME	DESIGNATION	DEPARTMENT	RESEARCH AREA
1	Dr Thota Nagaraju	Asst. Professor	Economics & Finance	Financial & Development Economics
2	Ramakant	Lecturer	EEE	Nano Scale VLSI Devices
3	Sandeep Kumar	Lecturer	EEE	Microwave Engineering
4	B Yegnanarayana	Professor Emeritus	EEE	Signal Processing Artificial Neural Networks
5	Rishi Kumar	Asst Professor	Economics & Finance	Development Economics
6	Barsha Mitra	Asst Professor-I	CS & IS	Access Control Computer Security
7	Balasubramanian M	Lecturer	EEE	Optical Mems Based Intertial sensing systems
8	AV Ravi Teja	Asst Professor-I	EEE	Machine Drives and Power Electronics
9	Pavan Kumar Penumakala	Asst Professor-I	Mechanical	Mechanical Process Engineering and Material Modeling
10	Dr Dushyant Kumar	Asst Professor	Economics & Finance	Applied Microeconomics, Conflict Theory
11	Prof Vijaya Bhaskar Marisetty	Professor	Economics & Finance	Corporate Finance
12	Dr Abdul Quadir	Asst Professor	Economics & Finance	Game Theory, Mechanism design and Auctions
13	Dr Suvadip Batabyal	Asst Professor-I	CS & IS	Computer Network, Real Time Systems
14	Dr Mini Thomas P	Asst Professor	Economics & Finance	International Economics, Macroeconomics
15	Dr Subhrakanta Panda	Asst Professor-I	CS & IS	Software Engineering
16	Dr Siva Prasad AVS	Asst Professor-I	Mechanical	Solid Mechanics & Design
17	Dr Pavan Kumar P	Asst Professor	Mechanical	Design
18	Dr Siva Prasad AVS	Asst Professor	Mechanical	Design



## BITS in Media

